

SHORT COURSE: TOOLS FOR WETLAND ASSESSMENT –17th to 21st August 2020



Wetlands on the coastal plain in the iSimangaliso Wetland Park, northern KwaZulu-Natal.

Course overview

According to the National Water Act (NWA), wetlands form part of watercourses which encompass vitally important water resources and as such are subject to protection through relevant legislation. The course "Tools for Wetland Assessment" introduces participants to a range of tools currently available to conduct or evaluate wetland assessments. Professionals and practitioners who conduct or evaluate wetland assessments should be familiar with the range of tools covered in the course. The major aspects covered in the course include:

- Wetland delineation;
- Assessment of wetland integrity using the updated WET-Health tool;
- Assessment of wetland ecosystem services; and
- An introduction of other tools (Buffer guidelines, Offset guidelines etc.).

In order to do these assessments, professionals need to understand the hydrological, geomorphological and ecological processes in wetlands as wetlands are dynamic features and integrate processes throughout the landscape. Wetland assessment requires an understanding of wetland origin and dynamics in order to make sensible decisions about human activities and appropriate mitigation measures.

The course is designed to equip participants with practical skills to undertake wetland assessments. Skills include mapping, interpreting soil wetness based on soil morphology, identification of hydrogeomorphic (HGM) wetland types and ecosystem services, assessment of wetland integrity and vulnerability, understanding the significance of simple measures of water quality, basic understanding of landscape-level processes and change, and appropriate use of individual assessment tools.

With the outbreak of COVID-19 and the wide reaching impact that this is having on the broader South African populous, it seems appropriate to host a virtual course, regardless of the status of the lockdown at the time of the course inception. In addition, owing to the uncertain financial times ahead, a virtual course allows for the reduction in course costs to participants.

When?

 17^{TH} TO 21^{ST} AUGUST 2020

Where?

FROM YOUR BASE OF OPERATIONS. PRESENTING THE FIRST VIRTUAL TWA COURSE.

Structure of the course

The course comprises a series of 30 to 45 minute lectures including:

- An introduction to wetlands
- An introduction to wetland delineation
- Wetland origin and dynamics
- Wetland values and assessment of ecosystem services
- Wetland integrity and assessment of wetland health
- Introduction to other tools and guidelines

The course is primarily designed to develop practical skills that allow participants to undertake meaningful wetland assessments. The range of practical activities and skills covered is extremely varied and will be covered virtually through discussions and desktop practicals. In addition, a ONE DAY field trip will take place in each of Johannesburg, Durban and Cape Town between the 24th and the 28th of August 2020 with lecturers on the TWA course. The wetlands visited during these fieldtrips will form the basis of the post-course assignment.

Post-course assignment

The purpose of the assignment is to allow participants to demonstrate their ability to:

- Determine wetland hydrogeomorphic setting;
- Delineate and map temporary, seasonal and permanent zones of a wetland;
- Apply guidelines for wetlands and map buffer zones;
- Assess the provision of wetland ecosystem services;
- Assess the health of a wetland; and
- Apply assessment tools for a development that impacts the wetland.

The assignment should apply to one of four pre-selected wetlands. Three of these wetlands will be visited on the course fieldtrips, and the fourth will be a desktop option to those participants that cannot attend a fieldtrip. It is **strongly** recommended that participants attend a fieldtrip.

Who should attend?

Professionals and practitioners who conduct or evaluate wetland assessments. The course is designed as an Honours-level course. Participants are therefore expected to have a basic degree or equivalent qualification.

Certification

A certificate of competence will be issued to those participants who pass the coursework components and both (i) submit a post-course assignment in which the wetland associated with a fieldtrip is fully assessed, and (ii) pass it with a mark of 70% or more. Submission of the assignment is voluntary.

A certificate of attendance is issued to those participants who pass the coursework assignments but do not do the written assignment. Note that participants qualify for only one certificate.

For participants registered with SACNASP – the TWA course is worth 5 CPD points.

Materials provided to participants

PDF versions of each of the following:

- WET-ROADMAP
- A PRACTICAL FIELD PROCEDURE FOR IDENTIFICATION AND DELINEATION OF WETLANDS AND RIPARIAN AREAS
- WET-ECOSERVICES
- WET-HEALTH
- WET-ORIGINS

Course requirements

The following equipment/components are required by the participants to ensure that their experience is as beneficial to their professional development as possible:

- A reliable internet connection;
- A personal computer with Microsoft Office or any alternative suite that works similarly to and is compatible with MS Word, PowerPoint and Excel;
- A free Dropbox account;
- A free Zoom account; and
- Access to Google Earth (beneficial but not essential).

Qualification and experience of teachers

Professor Fred Ellery has a PhD and over 30 years' experience in wetland science, restoration and management. He has published widely and is an internationally recognized teacher and scholar. He has received multiple national and international awards for his continued contribution to wetland science.

Ryan Edwards is a wetland specialist with 12 years consulting experience and is the owner and director of Verdant Environmental. Ryan was involved in the development of the recently published Version 2 of the WET-Health tool and will be presenting on the application of this tool.

Members of the GroundTruth will present sections of the course with extensive, collective experience in wetland delineation, wetland integrity and functional assessments, wetland rehabilitation planning and implementation, wetland offset studies, wetland creation projects and vegetation and soil assessments.

Costs

The cost of the course is R 6 250.00 and includes:

- Digital course notes;
- Access to online video lecture material during and for 4 weeks after the course;
- Supporting documents and materials for practical assignments;
- Daily interactive Q&A sessions with the course presenters;
- Digital copies of selected WET-Series material; and
- A day-long fieldtrip to a wetland in either Johannesburg, Durban or Cape Town with a TWA course representative.

Additional costs that are the responsibility of participants include:

- Traveling to and from the fieldtrip destination; and
- Meals on the fieldtrips will NOT be provided.

Contact details:

Please email the Registration Reply Form to Steven Ellery at <u>steven@groundtruth.co.za</u> to reserve a position on the TWA 2020 course.

Phone: +27 (0)33 343 2229

Address any course content related queries to Fred Ellery: <u>f.ellery@ru.ac.za</u>

Costs and payments

The course will cost R 6 250.00. Payments made before the 8th of June will receive a discount of 5%. In the case of more than one applicant from a given institution, an additional discount of 5% will be offered to each participant. Information about payment will be forwarded once an expression of interest and a Registration Reply Form has been received.